

Claims

1. Valve which is insertable into a receiving recess (21) of a valve carrier (22), the valve (1, 1', 1'', 1''') comprising a first housing part (2, 2', 2'', 2''') and a closing body (4) which cooperates with a sealing surface (9) to form a sealing seat, the valve (1, 1', 1'', 1''') being fixable in the receiving recess (21) of the valve carrier (22) by means of the first housing part (2, 2', 2'', 2'''),

characterised

in that a second housing part (3, 3') is connectable by way of a first end (7) to the first housing part (2, 2', 2'', 2''') and the sealing surface (9) cooperating with the closing body (4) is formed on the second housing part (3, 3').

2. Valve according to Claim 1,

characterised

in that the first housing part (2, 2', 2'', 2''') is connectable to the second housing part (3, 3') via a press-fit connection.

3. Valve according to Claim 1 or 2,

characterised

in that the first housing part (2, 2', 2'', 2''') has a bearing surface (30, 30') which, with the valve (1, 1') inserted, determines the axial position of the latter with respect to the valve carrier (22).

4. Valve according to Claim 3,

characterised

in that a sealing element (32, 53) sealing in the axial direction is provided in the region of the bearing surface (30, 30').

5 5. Valve according to Claim 3 or 4,

characterised

in that an overall length (L) of the valve (1, 1', 1'', 1''') is determinable between a second end (8) of the second housing part (3, 3') and the bearing surface (30, 30') of the first housing part (2, 2', 2'', 2''') by a
10 depth to which the first end (7) of the second housing part (3, 3') is pressed into the first housing part (2, 2', 2'', 2''') or to which the first housing part (2, 2', 2'', 2''') is pressed into the first end (7) of the second housing
15 part (3, 3'), the pressing-in depth being increased by supporting the second end (8) of the second housing part (3, 3') in the receiving recess (21) upon insertion of the valve (1, 1', 1'', 1''').

20 6. Valve according to Claim 5,

characterised

in that a sealing edge (33) is formed at the second end (8) of the second housing part (3, 3').

25 7. Valve according to one of Claims 1 to 6,

characterised

in that a first region (16) is formed on the first housing part (2, 2', 2'', 2'''), this region forming a first press fit with a first region (35) of the second housing part (3, 3').
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8. Valve according to Claim 7,

characterised

in that a second region (17) is formed on the first housing part (2, 2', 2'', 2'''), this region forming a second press fit with a second region (36) of the second housing part (3, 3'), which has a different radial extent in relation to the first press fit.

9. Valve according to Claim 8,

characterised

in that a first conical transition (37) is formed between the first region (16) and the second region (17) of the first housing part (2, 2''), and a second conical transition (38) is formed between the first region (35) and the second region (36) of the second housing part (3).

10. Valve according to Claim 8,

characterised

in that, to increase the pressing force with increasing pressing-in depth, at least one of the regions (16, 17, 35, 36) of the first housing part (2, 2', 2'', 2''') and/or of the second housing part (3, 3') is conically shaped.

11. Valve according to one of Claims 8 to 10,

characterised

in that the axial extent of the first region (35) of the second housing part (3, 3') and the axial extent of the second region (17, 17') of the first housing part (2, 2', 2'', 2''') are equal.

12. Valve according to one of Claims 1 to 11,

characterised

in that, to check the pressing-in depth, a marking (18, 18') is arranged on the first housing part (2, 2', 2'', 2''') or on the second housing part (3, 3').

13. Valve according to one of Claims 1 to 11,

characterised

in that, to limit the pressing-in depth, a stop surface
5 (18') is formed on the first or the second housing part.

14. Valve according to Claim 13,

characterised

in that a region which is plastically deformable in the
10 event of a shortening of the overall length (L) exceeding
the maximum pressing-in depth is formed on the first
housing part (2', 2''').

15. Valve according to Claim 14,

15 **characterised**

in that the plastically deformable region has a radially
outwardly directed pre-curvature on the first housing part
(2', 2''').

20 16. Valve according to one of Claims 1 to 15,

characterised

in that the second housing part (3, 3') has an inlet
opening (10) axially penetrating through the second housing
part (3, 3').

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17. Valve according to one of Claims 1 to 16,

characterised

in that the first housing part (2, 2', 2'', 2''') has a
central recess (6) for receiving the closing body (4) and
30 the first end (7) of the second housing part (3, 3').

18. Valve according to Claim 17,

characterised

in that at least one radial outlet opening (11, 11') is made in the first housing part (2, 2', 2'', 2''') in the region of the central recess (6).

5 19. Valve according to Claim 18,
characterised

in that, in the region of the central recess (6), at least one further radial opening (19) is arranged offset with respect to the at least one outlet opening (11, 11')
10 axially in the direction of the closed end of the central recess (6).

20. Valve according to Claim 19,
characterised

15 in that the closing body (4) is of pot-shaped design and at its outer periphery an encircling groove (20) is formed, the axial position and extent of which are chosen so that the groove at least partly overlaps the at least one further radial opening (19) when the closing body (4), with
20 the valve (1, 1', 1'', 1''') mounted, sealingly cooperates with the sealing surface (9).

21. Valve according to one of Claims 16 to 20,
characterised

25 in that the closing body (4) forms, with the central recess (6) of the first housing part (2, 2'), a clearance fit which adjusts the damping of the valve (1, 1', 1'', 1'''), and pressure medium displaced from a rear volume (6') upon movement of the closing body (4) can be led away through
30 the gap forming the clearance fit between the closing body (4) and the central recess (6).

22. Valve according to one of Claims 1 to 21,

characterised

in that the sealing surface (9) is formed on the end face of the first end (7) of the second housing part (3, 3').

5 23. Valve according to one of Claims 1 to 22,

characterised

in that the first housing part (2, 2', 2'', 2''') is fixable in a valve carrier (22) by means of a screw connection (13, 24).